# General Attitude and Behavior Survey Baseline Findings

November 2007

#### Submitted to:

California Integrated Waste Management Board (CIWMB)



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#### **EXECUTIVE SUMMARY**

In 2007, the California Integrated Waste Management Board (CIWMB) conducted a telephone survey of California residents regarding their environmental priorities, their awareness of the practices that reduce landfill waste, and their waste reduction and recycling habits. The General Attitude and Behavior Survey, conducted by Gomez Research, will be used to: (1) refine public outreach strategies and increase waste reduction, reuse, and recycling; (2) measure the proportion of residents who are aware of practices that reduce landfill waste; and (3) measure the proportion of residents who regularly participate in waste reduction and recycling activities. The following report presents baseline findings, which will be used to compare changes in awareness and behavior over time.

A total of 822 residential surveys were conducted, yielding an overall margin of error of +/-3 percent at the 95 percent confidence level. A total of 411 surveys were conducted with English-speaking residents, 210 with Spanish-speaking residents, and 201 with Chinese-speaking residents, yielding a margin of error of +/-5 percent for the English-language sample and +/-7 percent for the Spanish- and Chinese-language samples. Differences presented below are statistically significant at the .05 level. Key findings are presented below.

#### **Key Findings**

#### **Environmental Priorities and Beliefs**

- Air pollution, followed by global warming and water pollution, are the top environmental priorities for California residents, regardless of language spoken. Half of all residents surveyed reported that they were concerned about air pollution, and more than one-third (35 percent) mentioned air pollution first when asked to name all the environmental problems that concerned them. In contrast, less than one in five residents identified landfill waste, toxic waste, or the extinction of plants animals as an environmental concern. Respondents with a college degree, and those who spoke English, were statistically more likely to be concerned about global warming.
- The overwhelming majority of California residents believe global warming is real, are concerned about it, and think the actions of individuals can have an impact on the outcome. Nearly all California residents who believe global warming is real are "somewhat concerned" or "very concerned" about the problem (88 percent). More than three-fourths (78 percent) of all respondents reported that they believe practicing recycling and waste reduction has a "great impact" or "some impact" on climate change.

#### **Awareness of Recycling and Waste Reduction Practices**

• Residents are significantly more familiar with recycling practices than they are with strategies for reducing waste, including re-using products or buying items with less packaging. When asked how they could reduce landfill waste, two-thirds (67 percent) of residents first mentioned the recycling of bottles, cans, newspapers, magazines, junk mail, and paper products. In contrast, less than 5 percent of residents first mentioned

buying recycled products, buying products with less packaging, producing less waste, or buying reuseable products. Notably, 16 percent of respondents reported, "don't know" when asked how they could reduce landfill waste.

- California residents are well informed about the kinds of household waste that can be recycled, although awareness varies by language spoken. More than eight out of 10 residents know that plastic food containers, cardboard, magazines, junk mail and mixed paper, electronic equipment, and yard waste can be recycled. Spanish-speaking residents tend to be less familiar than other groups about the types of items that can be recycled.
- When needing information on waste reduction and recycling, residents most frequently conduct an Internet search and, secondly, contact a government agency. English-speaking residents are more likely to conduct a general Internet search when they need information, while the primary source of information for Chinese-speaking residents is family and friends, followed by an environmental organization and the media. Spanish-speaking residents were more likely to report, "don't know" when asked where they would go for information.
- Most California residents are unfamiliar with the California Integrated Waste Management Board. More than two-thirds (70 percent) of California residents have not heard of CIWMB. English-speakers and those with above median incomes were more likely to be familiar with the agency. Awareness of CIWMB was lowest among Chinese-speaking respondents (8 percent, compared to 19 percent among Spanish-speakers and 31 percent among English-speakers).

#### **Recycling Habits**

- The majority of California residents regularly recycle key household items, most frequently metal, tin, and aluminum. Less than half of all respondents (48 percent), however, recycle plastic grocery bags on a regular basis. In general, residents with recycling bins, those living in single-detached homes, those with a college degree, and those with above median incomes were more likely to recycle items consistently.
- While most Californians recycle on a regular basis, only one quarter are currently recycling as much household waste as they could. Nearly two-thirds of California residents (65 percent) recycle at least 25 percent of their household trash but less than one-out-of-five California households recycle 75 percent or more. Spanish speakers tend to recycle less of their total trash, compared to other groups. English-speakers were more likely than Spanish or Chinese speakers to recycle 75 percent or more waste.
- Among households that recycle 25 percent or less of their household trash, the two most frequently cited reasons for not recycling was the inconvenience of storing recyclables and not having recycling bins, both at 22 percent. Among households that recycle more than 50 percent of their total waste, the most frequently cited reason for not recycling more was the belief that no additional items could be recycled.

• Recycling participation rates are significantly higher among residents with recycling bins. Three-out-of-four California households surveyed have recycling bins (75 percent). Of those, nearly three-fourths (72 percent) use the bins to recycle at least 25 percent of their household trash. Among households with no curbside recycling services, less than half recycle that amount. Respondents living in single-family homes are significantly more likely to have curbside recycling services compared to those living in multi-family units. A total of 60 percent of multi-family households surveyed have recycling bins compared to 83 percent among single-family households.

#### **Waste Reduction Habits**

• In contrast to recycling habits, the majority of California residents are not consistently practicing waste reduction strategies. Only about one-third of California residents reuse food containers or drink water from sources other than small plastic water bottles on a regular basis, and less than one-in-five (18 percent) buy products in bulk or items or with less packaging. Spanish- and Chinese-speaking respondents were more likely than English-speakers to report that they used reuseable food containers.

#### **Organic Waste Disposal**

- Less than 10 percent of California residents practice composting. California residents most frequently dispose of food scraps along with the regular trash (58 percent), followed by the garbage disposal (38 percent). Only 8 percent of residents compost, either in their backyard or through a curbside compost program. Spanish-speaking respondents were more likely to report that they dispose of food scraps along with the regular trash and the least likely to compost, compared to other groups. The primary reason residents compost is to benefit their gardens or yards.
- Nearly two-thirds of California residents have bins to recycle grass clippings and yard waste (64 percent). Of those households with green waste bins, 91 percent use the bins to recycle.

#### **Hazardous Waste Disposal**

- Half of California residents properly dispose of hazardous waste, with just over one-third (39 percent) reporting that they take their hazardous waste to a designated collection facility and another 11 percent who have their hazardous waste collected curbside. English-speaking respondent were more likely to report that they take their hazardous waste to a designated site than were non-English speaking respondents. Spanish-speaking respondents were the least likely to report that they take their hazardous waste to appropriate facilities. More than half of residents (57 percent) are willing to drive between two and ten miles to dispose of hazardous materials and more than one-quarter (27 percent) are willing to drive more than 10 miles.
- Nearly one-third of all respondents surveyed reported that they do not have hazardous waste, suggesting that residents are not well informed about what

**constitutes hazardous materials.** Spanish- and Chinese-speaking respondents were more likely to report that they do not have hazardous waste, compared to English-speaking respondents.

- The most frequently cited reason for not disposing of hazardous waste properly was lack of information about where to go, followed by not enough time, too few items to be worthwhile, and not knowing when to go. A total of 15 percent of respondents asked the question reported that they did not know what constituted hazardous waste.
- Among residents who do not properly dispose of their hazardous waste, convenience, not financial incentives, appears to be the strongest motivator. Eight-out-of-ten respondents (80 percent) reported that they would be "very likely" to drive to a hazardous waste disposal site in the future if it were conveniently located. In contrast to convenience as an incentive, only half of residents (56 percent) reported that they would be "very likely" to take their waste to a hazardous waste disposal site if offered a financial incentive.

#### **Conclusions and Recommendations**

Study findings suggest that past outreach efforts by CIWMB and other entities have helped raise public awareness about recycling and waste reduction; however, further efforts are needed. California residents are well informed about recycling practices and, although they could recycle a greater proportion of their household waste, are regularly recycling key items. The majority of California residents consistently recycle metal, tin, aluminum, plastic, paper, and glass. In contrast, residents are less well informed about strategies to reduce waste and do not consistently reduce and reuse. Similarly, many residents are not well informed about what constitutes household hazardous waste or how to dispose of these materials.

Based on these findings, we recommend the following strategies for reducing waste and promoting proper waste disposal.

Recommendation 1: Increase public outreach to promote waste reduction and reuse, which lags behind recycling in both public awareness and practice. In contrast to recycling habits, the majority of California residents are not consistently practicing waste reduction strategies. Only about one-third of California residents reuse food containers or drink water from sources other than small plastic water bottles on a regular basis, and less than one-in-five residents (18 percent) consistently buy products in bulk or items with less packaging.

Recommendation 2: Increase public awareness about what constitutes household hazardous waste and provide details about when and where residents can take these materials to collection sites. Nearly one-third of all residents surveyed reported that they do not have hazardous waste, and non-English speakers were even more likely to make such claims. The most frequently cited reason for not disposing of hazardous waste properly was lack of information about where to go, followed by lack of time. Outreach efforts should also include Spanish-speaking markets since these residents are less likely to take hazardous waste to disposal sites and more likely to report that they have no such materials.

Recommendation 3: In promoting the proper disposal of hazardous waste, focus resources on making disposal convenient, rather than providing coupons and cash incentives. Eight-out-often respondents (80 percent) reported that they would be "very likely" to drive to a hazardous waste disposal site in the future if it were conveniently located. In contrast to convenience as an incentive, only half of residents (56) reported that they would be "very likely" to take their waste to a hazardous waste disposal site if offered a financial incentive.

Recommendation 4: Continue to support efforts to make recycling services available to multi-family households. Households with curbside recycling services consistently use the bins to recycle and recycle a larger proportion of their total waste compared to residents without the service. Among households that recycle 25 percent or less of their household trash, the two most frequently cited reasons for not recycling was the mess and inconvenience of storing recyclables and not have recycling bins.

Recommendation 5: Continue public outreach efforts targeting Spanish-speaking residents with regard to recycling. Spanish-speaking residents tend to be less familiar than other groups about the types of items that can be recycled, more likely to report "don't know" when asked where they would go for information on recycling, and, along with Chinese-speaking residents, tend to recycle less of their total household waste than do other residents.

#### INTRODUCTION

In 2007, as part of an on-going effort to promote waste reduction and recycling, the California Integrated Waste Management Board (CIWMB) conducted a comprehensive survey of California residents regarding their environmental priorities, beliefs, and behaviors. The purpose of the General Attitude and Behavior Survey was to gain a better understanding for the environmental issues that are of greatest concern to Californians; the public's awareness of appropriate waste reduction and recycling practices, current behaviors, and the barriers that interfere with appropriate action.

Data from the study will be used to: (1) refine public outreach strategies and increase waste reduction, reuse, and recycling; (2) measure the proportion of residents who are aware of practices that reduce landfill waste; and (3) measure the proportion of residents who regularly participate in waste reduction and recycling activities. The following report presents baseline findings, which will be used to compare changes in awareness and behavior over time.

It should be noted that the General Attitude and Behavior Survey, like all surveys, has self-reporting bias and should be used in conjunction with results from State waste reports to determine the extent to which residents are participating in waste reduction activities. Survey research depends on respondents providing truthful and accurate reports of their activities.

The remainder of this report presents the survey methodology and findings that emerged from the data analyses, and is organized as follows:

- The **Methodology** section, which describes data collection and statistical methods;
- The **Findings** section, documenting environmental priorities, awareness of recycling and waste reduction practices, behaviors, and variations by demographics;
- Conclusions and Recommendations; and,
- The **Appendices**, which include the survey instrument with frequencies.

#### METHODOLOGY

A total of 822 residential surveys were conducted, yielding an overall margin of error of +/-3 percent at the 95 percent confidence level. A total of 411 surveys were conducted with English-speaking residents, 210 with Spanish-speaking residents, and 201 with Chinese-speaking residents (conducted in both Cantonese and Mandarin), yielding a margin of error of +/-5 percent for the English-language sample and +/-7 percent for the Spanish- and Chinese-language samples. The sample was evenly divided between men and women.

Telephone numbers were generated using both random-digit-dialing and random listed sample. For the English-language interviews, telephone prefixes for California were identified, and the remaining four digits were randomly generated. The random-digit-dialing sample was augmented with a random listed sample for the Spanish and Chinese interviews, based on surname and geographic location. All respondents were 18 years or older.

The surveys were conducted between September 14 and October 7, 2007 using a computer-assisted telephone interview (CATI) system, in which interviewers read questions from a computer screen and type respondents' answers directly into a database.

Chi Square and difference in proportion tests were conducted for all comparative analyses to identify whether observed differences among groups or categories were statistically significant.<sup>1</sup> All reported differences were statistically significant at the 95 percent confidence level unless otherwise noted.

For a copy of the survey, including frequencies, see **Appendix A.** 

#### Weighting

When all surveys were combined, weights were applied to ensure that completed surveys in English, Spanish, and Chinese were proportional to the actual number of people in the targeted market who speak those languages. Specifically, the expansion factor applied to each language is N/n, where N is the total number of residents in the actual population who speak a given language, and n is the number of completed surveys for that language. Once numbers were expanded to represent the actual population, they were weighted back down to the sample size by dividing the expanded total by N/n, where N is the total number of all targeted residents, and n is the total number of residents surveyed. Weighting factors were applied only when findings were presented for respondents overall. U.S. Census data were used to determine the total number of residents who speak each language in the targeted markets.

#### **Report Organization**

This report has been organized around the following topical areas:

- Profile of Residents Surveyed;
- Environmental Priorities and Beliefs;
- Awareness of Recycling and Waste Reduction Practices;
- Recycling Habits;
- Waste Reduction Habits;
- Organic Waste Disposal; and,
- Hazardous Waste Disposal.

The next section of this report presents study findings.

<sup>&</sup>lt;sup>1</sup> A statistically significant difference means that the difference among groups is not by chance, and that a real difference exists among groups.

#### **FINDINGS**

This section presents a profile of respondents surveyed in 2007, followed by detailed findings regarding residents' environmental priorities, their awareness of the practices that reduce landfill waste, and their waste reduction and recycling habits.

#### **Profile of Residents Surveyed**

**Table 1** presents the ethnic distribution of households surveyed. Approximately one-third of the residents surveyed identified themselves as Hispanic/Latino (34 percent), and just over one-quarter identified themselves as Asian (28 percent) or Caucasian (29 percent). A total of 2 percent of respondents identified themselves as African-American. Although representation of African-Americans in the sample appears low, African-Americans make-up only 7 percent of all residents in California, which explains their low occurrence in the random sample (U.S. Census Bureau State and County QuickFacts).

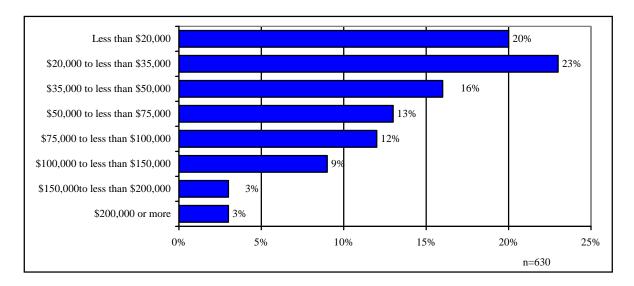
Table 1: Ethnic Distribution of Households Sampled All Respondents, Unweighted

	Hispanic/ Latino	African- American	Asian	Caucasian	Other	Refused
n=822	34%	2%	28%	29%	4%	3%

<sup>\*</sup>Table based on: Q28: "Would you please tell me what ethnic group you identify with?"

As seen in **Figure 1**, more than half of the households surveyed (59 percent) had incomes below the median household income for California (\$50,000). This skew in the data toward lower income groups reflects the low median household income among non-English speakers who were over-sampled to allow for analysis by language. (U.S. Census Bureau State and County QuickFacts, complied 2004). Data were subsequently weighted.

Figure 1: Income Distribution of Households Sampled All Respondents, Unweighted



<sup>\*</sup>Chart based on Q29: "I am going to read some categories of household income. Please stop me when I reach the category of your total 2006 annual household income, before taxes." Base excludes respondents who answered "Don't know/refused."

**Figure 2** presents the educational level of respondents. More than half the residents surveyed (52 percent) had a college or post-graduate degree. The highest level of education for one-third of the households was a high school diploma and a total of 14 percent reported having some college or vocational training.

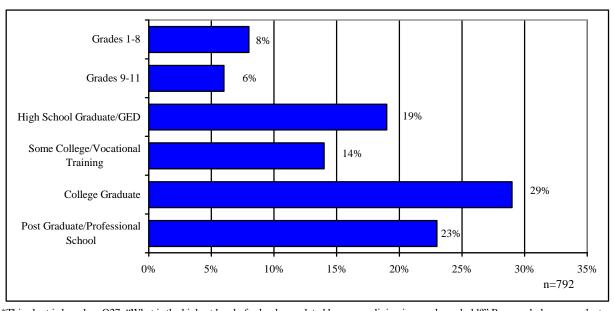


Figure 2: Educational Level of Households Sampled All Respondents, Unweighted

Nearly two-thirds of the residents surveyed (64 percent) live in single detached homes, and one-third in multi-family units, including apartments, condominiums, and townhouses. See **Figure 3**.

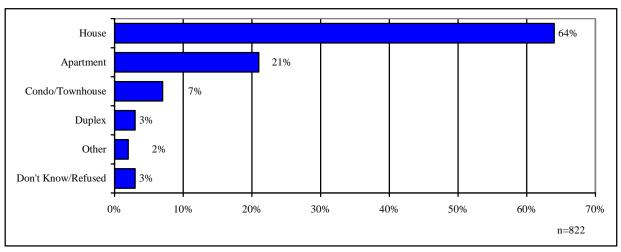


Figure 3: Household Type Households Sampled All Respondents, Unweighted

<sup>\*</sup>This chart is based on Q27: "What is the highest level of school completed by anyone living in your household?" Base excludes respondents who answered "Don't know/refused."

<sup>\*</sup>This chart is based on Q32: "Do you live in a: House, Duplex, Apartment, Condominium Townhouse, or Other?"

**Figure 4** presents age distribution among respondents. More than half the respondents surveyed (57 percent) were under the age of 50. Less than one-in-five (15 percent) were 65 or older. The average age was 47.

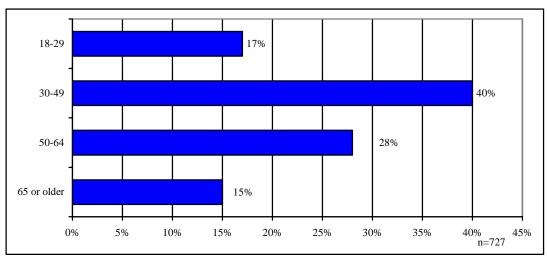


Figure 4: Age of Respondents Sampled All Respondents, Unweighted

<sup>\*</sup>Chart is based on Q26: "What year were you born?" Base excludes "don't know/refused."

#### **Environmental Priorities and Beliefs**

#### **Environmental Priorities**

A key objective of the General Attitude and Behavior Survey was to identify residents' environmental priorities, including what environmental issues come to mind first when people think about environmental protection. Results are presented in **Figure 5**. **California residents are most concerned about air pollution, followed by global warming and water pollution.** (A total of 1 percent of all water mentions included references to scarcity of water.) Half of all residents surveyed reported that they were concerned about air pollution, and more than one-third (35 percent) mentioned air pollution first when asked to name all the environmental problems that concerned them. In addition, more than a quarter of respondents were concerned about global warming and water pollution, although global warming had a higher number of first mentions. In contrast, less than one-in-five residents identified landfill waste, toxic waste, or the extinction of plants animals as an environmental concern. A total of 11 percent of respondents had difficulty identifying even one environmental issue, evidenced by a response of "don't know/refused."

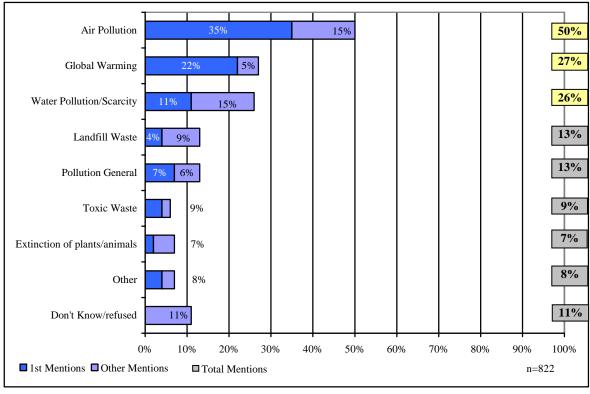


Figure 5: Environmental Priorities, Unprompted Respondents Overall

\*Chart is based on Q2: "What environmental problems concern you most?" Proportions highlighted in yellow are statistically different from all other proportions at the 95 percent confidence level. Air pollution is rated significantly higher than either global warming or water pollution; however, global warming and water pollution were not significantly different from each other, except in first mentions.

While most residents shared these environmental priorities, responses varied significantly by education and language spoken. **Respondents with a college degree, and those who spoke** 

### English, were statistically more likely to be concerned about global warming, compared to other groups.

**Figure 6** presents more detailed findings for English-, Spanish-, and Chinese-speaking respondents. Air pollution, global warming, and water pollution were the top environmental priorities across all language groups. English-speakers, however, were statistically more likely to report that they were concerned about global warming and Spanish-speakers were more concerned about toxic waste.

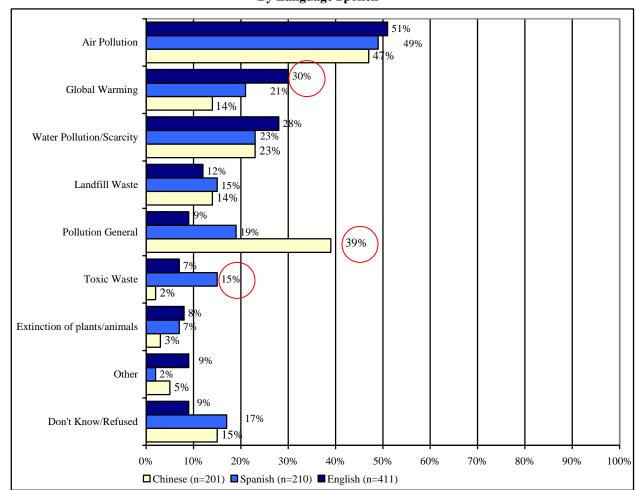


Figure 6: Environmental Priorities, Unprompted By Language Spoken

\*Chart is based on Q2: "What environmental problems concern you most?" Circle indicates a statistically significant difference at the 95 percent confidence level. English-speakers were more likely to report that global warming concerned them. Chinese speakers were more likely to report that they were concerned about pollution in general compared to other respondents. Spanish speakers were more likely to be concerned about toxic waste.

Respondents were asked directly if they were concerned about the volume of waste produced by California households. Results are presented in **Figure 7. More than three-quarters of all residents surveyed (79 percent) reported that they were "very concerned" or "somewhat concerned" about the waste generated.** Spanish-speaking respondents were more likely to be concerned about waste production than were either English or Chinese speaking respondents. A total of 87 percent of all Spanish speakers surveyed reported that they were "very concerned" or

"somewhat concerned" about waste, compared to 76 percent among English speakers, and 70 percent among Chinese speakers. Chinese-speaking respondents were the least likely to report concern over household waste and landfill. Nearly one-third of Chinese speakers (29 percent) were "not to concerned" or "not at all concerned" about waste, as seen in Figure 8.

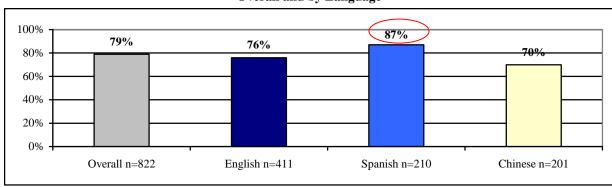


Figure 7: Proportion "Somewhat Concerned" or "Very Concerned" About Waste Overall and by Language

\*This chart is based on Q3: "How concerned are you about the amount of garbage California households produce?" Statistically significant differences at the 95% confidence level are circled. Spanish-speaking respondents were statistically more likely than English- or Chinese-speaking respondents to be concerned about waste.

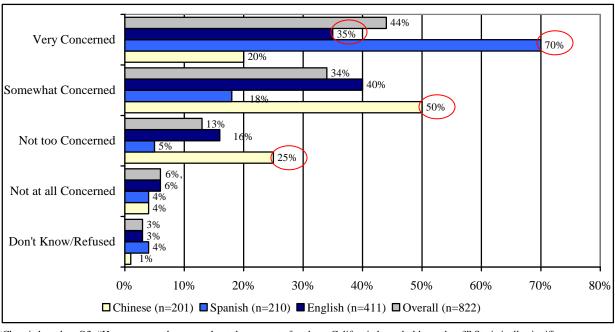


Figure 8: Proportion Concerned About the Volume of Waste California Produces Respondents Overall and by Language

<sup>\*</sup>Chart is based on Q3: "How concerned are you about the amount of garbage California households produce?" Statistically significant differences at the 95 percent level are circled. Spanish-speaking respondents were more concerned about the amount of waste produced, compared to English-speaking or Chinese-speaking respondents. Chinese speakers were less concerned about the volume of waste produced, compared to all other groups.

#### **Beliefs about Global Warming**

As a follow-up to general questions about environmental concerns and beliefs, respondents were asked more detailed questions specifically about global warming, including how concerned they are about climate change. As seen in Figure 9, more than eight out of 10 residents believe global warming is real, regardless of language spoken.

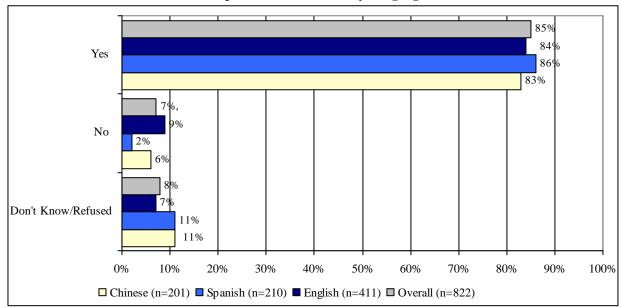


Figure 9: Proportion of California Residents Who Believe Global Warming is Real Respondents Overall and by Language

Respondents who said they believed in the existence of global warming were then asked how concerned they were about the warming trend. Results are presented in Figure 10. Nearly all California residents (88 percent among respondents overall and between 86 and 91 percent by language), are "somewhat concerned" or "very concerned" about global warming.

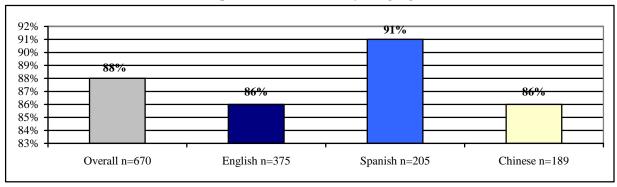


Figure 10: Proportion "Somewhat Concerned" or "Very Concerned" About Global Warming Respondents Overall and by Language

\*This chart is based on Q22: "How concerned are you about global warming?" There were no statistically significant differences by language.

**Figure 11** provides a detailed breakdown of responses by language spoken. While most residents expressed concern over global warming, **Spanish-speaking residents were more likely to** 

<sup>\*</sup>This chart is based on Q21: "Do you believe global warming is really happening?" There were no statistically significant differences by language.

report that they were "very concerned" (70 percent) compared to English-speaking (56 percent) or Chinese–speaking respondents (38 percent). Chinese-speaking residents were the least likely to report that they were very concerned compared to all other groups.

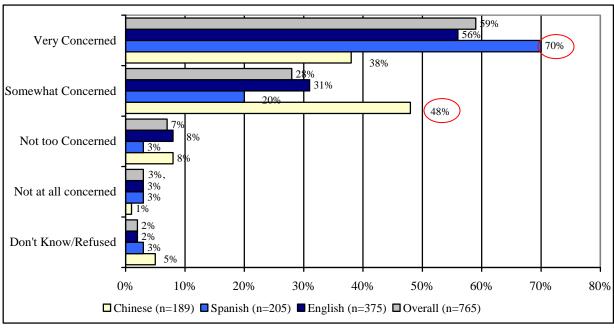


Figure 11: Proportion Concerned Global Warming Respondents Overall and by Language

<sup>\*</sup>Chart is based on Q22: "How concerned are you about global warming?" Statistically significant differences at the 95 percent level are circled. Spanish-speaking respondents were more likely to report that they were "very concerned" about global warming compared to English- or Spanish-speaking respondents. Chinese-speaking residents were statistically less likely to report that they were very concerned compared to all other groups.

Next, respondents were asked whether they believed the actions of individuals have an impact on global warming. Overall, more than eight-out-of-ten respondents asked the question (84 percent) reported that they believe the actions of individuals can have "great impact" or "some impact," as seen in Figure 12.

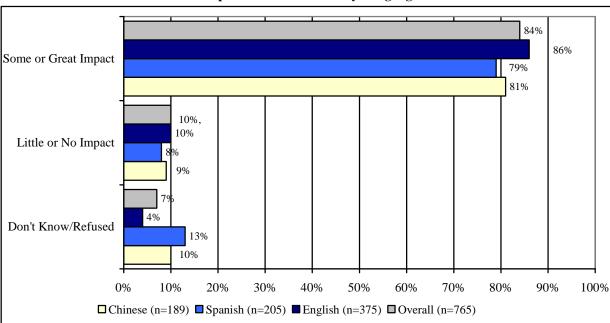


Figure 12: Proportion Who Believe the Actions of Individuals Have an Impact on Global Warming Respondents Overall and by Language

<sup>\*</sup>Chart is based on Q23: "Do you believe that the actions of individuals have a great impact, some impact, little impact, or no impact on global warming?" There were no meaningful differences by language.

To explore the extent to which the public recognizes a connection between waste and global warming, respondents were asked how much of an impact they think recycling and waste reduction have on global warming. More than three-fourths (78 percent) of all respondents reported that they believe practicing recycling and waste reduction has a "great impact" or "some impact" on global warming, as seen in Figure 13. Spanish-speaking respondents were more likely than other respondents to report that they believed recycling and waste reduction can influence global warming.

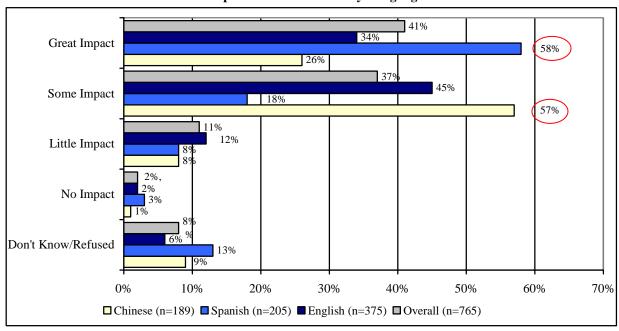


Figure 13: Proportion Who Believe Recycling and Waste Reduction Affect Global Warming Respondents Overall and by Language

<sup>\*</sup>Chart is based on Q24: "How much of an impact do you think recycling and waste reduction have on global warming: A great impact, some impact, little impact, or no impact?" Statistically significant differences at the 95 percent level are circled. Spanish-speaking respondents were more likely than other respondents to report that they believed recycling and waste reduction have a great impact on global warming. Chinese-speaking respondents were more likely to report that recycling and waste reduction had only some impact on global warming.

#### **Awareness of Recycling and Waste Reduction Practices**

#### **Awareness of Practices that Reduce Landfill Waste**

Respondents were asked to name all the ways they could personally reduce the amount waste that ends up in California landfills. The question was designed to measure the proportion of residents who are aware of recycling and waste reduction practices. As presented in **Figure 14**, **residents are significantly more familiar with recycling practices than they are with strategies for reducing waste, such as reusing products or buying items with less packaging.** When asked how they could reduce landfill waste, two-thirds (67 percent) of residents first mentioned the recycling of bottles, cans, newspapers, magazines, junk mail, and paper products. In contrast, less than 5 percent of residents first mentioned buying recycled products, buying products with less packaging, producing less waste, or buying reuseable products. Notably, 16 percent of respondents reported "don't know" when asked how they could reduce landfill waste.

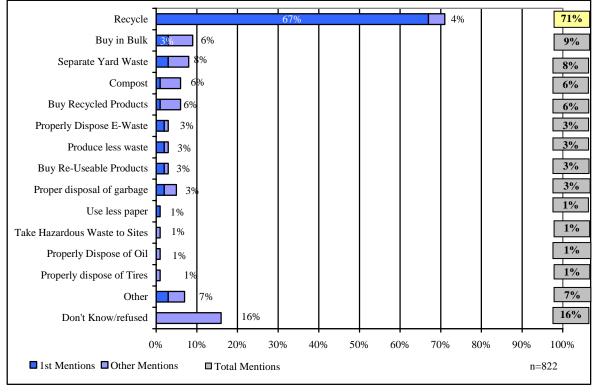


Figure 14: Awareness of Practices that Reduce Landfill Waste, Unprompted Respondents Overall

<sup>\*</sup> Chart is based on Q4: "In what ways can you personally reduce the amount of trash and garbage that ends up in landfills? Proportions highlighted in yellow are statistically different from all other proportions at the 95 percent confidence level. Awareness of recycling was significantly higher than awareness of all other strategies for reducing landfill waste.

**Figure 15** presents results by language spoken. English-speaking respondents were more aware of the need to recycle, buy in bulk, and reuse items as ways to reduce landfill waste, compared to Spanish-speaking and Chinese-speaking respondents. Chinese-speaking respondents were more likely to be aware of the need to separate yard waste and to buy recycled products, but were also more likely to report "don't know" when asked what practices they were aware of that could reduce landfill waste.

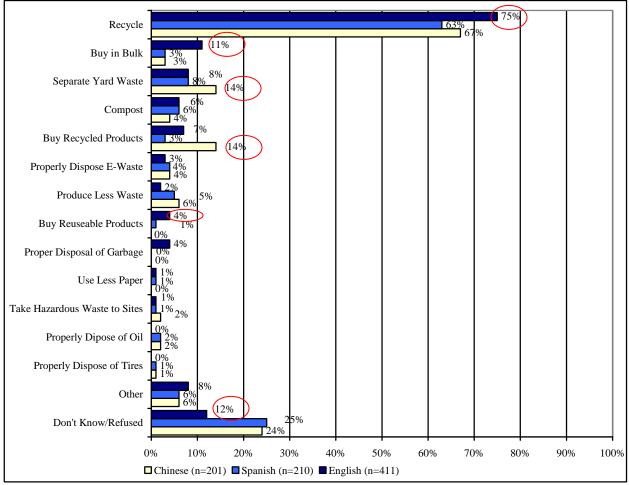


Figure 15: Awareness of Practices that Reduce Landfill Waste, Unprompted By Language Spoken

\*Chart is based on Q4: "In what ways can you personally reduce the amount of trash and garbage that ends up in landfills?" Circle indicates a statistically significant difference at the 95 percent confidence level. English-speaking respondents were more aware of the need to recycle, buy in bulk, and reuse items as ways to reduce landfill waste, compared to Spanish-speaking and Chinese-speaking respondents. Chinese-speaking respondents were more likely to be aware of the need to separate yard waste and to buy recycled products. Chinese-speaking respondents were more likely than other groups to report "don't know" when asked what practices they were aware of that could reduce landfill waste.

#### Awareness of Household Items That Can be Recycled

In addition to an unprompted question about the practices that can reduce landfill waste, respondents were asked directly (prompted question) if they were aware that certain items could be recycled. As seen in Figure 16, California residents are well informed about the kinds of

household waste that can be recycled. More than eight-out-of -ten respondents knew that plastic food containers, cardboard, magazines, junk mail and mixed paper, electronic equipment, and yard waste could be recycled. While overall awareness is high, Spanish-speaking respondents were not as well informed as other respondents about the types of items that can be recycled, notably magazines, junk mail, mixed paper, electronic equipment, and yard trimmings.

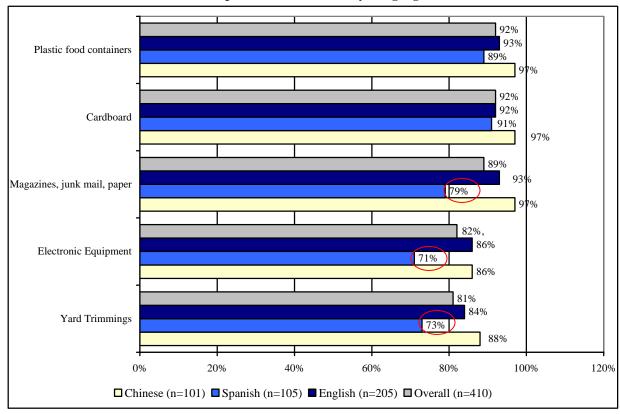


Figure 16: Awareness of Household Items that Can Be Recycled, Prompted Respondents Overall and by Language

<sup>\*</sup>Chart is based on Q5: "Before this survey, were you aware that the following household items can be recycled?" Statistically significant differences at the 95 percent confidence level are circled. Spanish speakers were less aware that magazines, electronic equipment, and yard trimmings could be recycled. This question was a module question and was only asked of half the respondents.

<sup>&</sup>lt;sup>2</sup> It should be noted that prompted awareness might overstate awareness levels since respondents are reluctant to admit that they are unaware of a practice that is clearly of value to the interviewer and the survey effort.

#### **Sources of Information**

Respondents were also asked where they would go if they needed more information on how to reduce waste and recycle. Results are presented in Figure 17. Overall, residents most frequently conduct an Internet search to find information on waste reduction and recycling (42 percent), followed by contacting a government agency, either by visiting the website, calling, or visiting in person.

English-speaking residents were more likely to conduct a general Internet search when they need information, while the primary source of information for Chinese-speaking residents is family and friends, followed by an environmental organization and in-language media. Spanish-speaking residents were more likely to report "don't know" when asked where they would go for information.

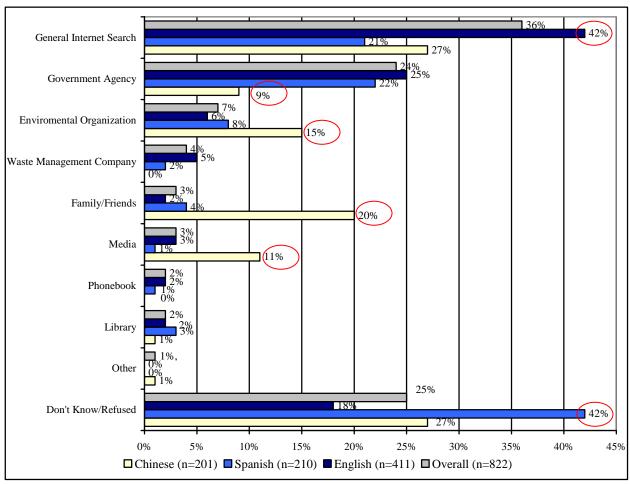


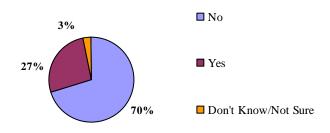
Figure 17: Sources of Information Regarding Recycling and Waste Reduction Respondents Overall and by Language

<sup>\*</sup>Chart is based on Q20: "If you wanted more information on how to reduce waste and recycle, where would you go?" Statistically significant differences at the 95 percent confidence level are circled. English-speaking respondents are most likely to conduct a general Internet search when they need information on recycling and waste reduction, statistically higher compared to other groups. The primary source of information for Chinese-speaking residents is family and friends, followed by an environmental organization and media. Spanish-speaking respondents were more likely to report "Don't know" when asked where they would go for information.

#### **Awareness of CIWMB**

As seen in Figure 18, more than two-thirds (70 percent) of California residents have not heard of the California Integrated Waste Management Board (CIWMB). English-speakers and those with above median incomes were more likely to be familiar with the agency. Awareness of CIWMB was lowest among Chinese-speaking respondents (8 percent, compared to 19 percent among Spanish-speakers and 31 percent among English-speakers).

Figure 18: Proportion of Respondents Who Have Heard of CIWMB Respondents Overall (n=412)



<sup>\*</sup>This chart is based on Q25: "Have you heard of the state agency called the California Integrated Waste Management Board" This question was a module question and was only asked of the half the respondents.

#### **Recycling Habits**

#### **How Frequently Residents Recycle**

The survey addressed waste reduction and recycling behavior, in addition to awareness and attitudes. Respondents were asked how frequently they recycled metal, tin, and aluminum; plastic; glass; mixed paper and newspapers, and plastic grocery bags. As seen in Table 2, the majority of California residents regularly recycle key household items, most frequently metal, tin, and aluminum. Less than half of all respondents (48 percent), however, recycle plastic grocery bags on a regular basis. In general, residents with recycling bins, those living in single-detached homes, those with a college degree, and those with above median household income were more likely to recycle items consistently.

Table 2: How Frequently Residents Recycle Selected Items, Respondents Overall (n=822)

	Every time	Most of the Time	Top Two Boxes	Some of the Time	Rarely	Never	Don't Know/ Refused
Metal/Tin/Aluminum	71%	12%	83%	7%	3%	7%	
Plastic	71	12	83	6	2	9	1
Glass	65	14	79	5	3	11	1
Paper/newspaper	60	14	74	6	4	15	
Plastic Grocery Bags	48	11	59	8	5	26	2%

<sup>\*</sup>Table is based on Q7: "Do you recycle the following items every time, most of the time, some of the time, rarely, or never? Significant differences at the 95 percent confidence level are highlighted. Residents recycle metal, tin, aluminum, and plastic more frequently than other materials, including glass and newspapers. Plastic grocery bags were recycled the least often. Results did not vary significantly by language spoken.

#### **Proportion of Weekly Trash That is Recycled**

Respondents were asked what proportion of their household trash they recycle on a weekly basis. Results are presented in Figure 19. Nearly two-thirds of California residents (65 percent) recycle at least 25 percent of their household trash and one-out-of-five California households recycle 75 percent or more. Spanish speakers tend to recycle less of their total trash, compared to other groups. English-speakers were more likely than Spanish or Chinese speakers to recycle 75 percent or more.

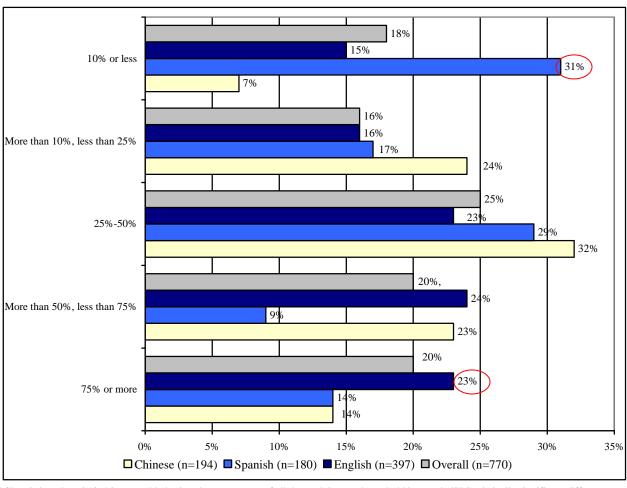


Figure 19: Proportion of Weekly Trash that is Recycled Respondents Overall and by Language

<sup>\*</sup>Chart is based on Q10: "On a weekly basis, what percentage of all the trash in your household is recycled?" Statistically significant differences at the 95 percent level are circled. Spanish-speaking respondents tend to recycle less of their total trash, compared to other groups. English-speakers were more likely than Spanish or Chinese speakers to recycle 75 percent or more of their trash. Respondents who answered, "Don't know/refused" were not included in the percentage base.

#### **Reasons for Not Recycling**

When asked why they do not recycle a greater proportion of their household trash, residents most frequently reported that no additional items could be recycled (31 percent), followed by the mess and inconvenience of storing recyclables (18 percent) (See Figure 20). Spanish-speakers were more likely to report that they did not have recycling bins, that there was no room in their recycling bins, and that there were too few items to make recycling worthwhile, compared to other groups. Among households that recycle 25 percent or less of their household trash, the two most frequently cited reason for not recycling was the mess and inconvenience of storing recyclables and not having recycling bins, both at 22 percent.

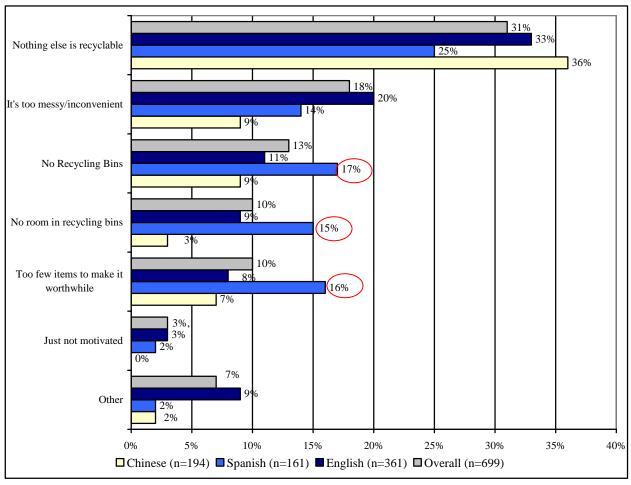


Figure 20: Reasons for Not Recycling More Household Waste Respondents Overall and by Language

\*Chart is based on Q11: "On a weekly basis, what percentage of all the trash in your household is recycled?" Statistically significant differences at the 95 percent level are circled. Spanish speakers were more likely to report that they did not have recycling bins, that there was no room in their recycling bins, or that there were too few items to make recycling worthwhile, compared to other language groups.

#### **Effect of Curbside Recycling Services on Participation Rates**

Recycling participation rates are significantly higher among residents with recycling bins, as seen in Table 3. Three out-of-four California households surveyed have recycling bins (75 percent). Of those, nearly three-fourths (72 percent) use the bins to recycle at least 25 percent of their household trash. Among households with no curbside recycling services, less than half recycle that amount.

Table 3: Proportion of Household Trash Recycled Weekly by Presence of Recycling Bins Respondents Overall

	Recycles 25% or Less	Recycles 25% or More
Has Curbside Recycling (n=587)	28%	72%
No Curbside Recycling (n=180)	55	45

Nearly two-thirds of California residents have bins to recycle grass clippings and yard waste (64 percent). Of those households with green waste bins, 91 percent use the bins to recycle.

Respondents living in single-family homes are significantly more likely to have curbside recycling services compared to those living in multi-family units. A total of 60 percent of multi-family households surveyed have recycling bins compared to 83 percent among single-family households.

#### **Waste Reduction Habits**

#### **How Frequently Residents Reduce and Reuse Selected Items**

Residents were asked how frequently they reduced their waste and reused certain items. In contrast to recycling habits, only about one-third of California residents reuse food containers or drink water from sources other than small plastic water bottles, and less than one-in-five (18 percent) buy products in bulk or items with less packaging. Results are presented in Table 4. Purchasing reuseable food containers, instead of plastic wrap or plastic bags, was practiced most frequently, followed by drinking water from sources other than small, plastic bottles, and buying products in bulk. Spanish- and Chinese-speaking respondents were more likely than English speakers to report that they used reuseable food containers.

Table 4: How Frequently Residents Reduce and Reuse Selected Items, Respondents Overall (n=822)

	Every Time	Most of the Time	Top Two Boxes	Some of the Time	Rarely	Never	Don't Know/Refused
Use Reuseable food containers	35	30	65%	20	6	7	2
Drink water from sources other than small, plastic bottles	34	24	58	16	11	15	1
Buy products in bulk	18%	29%	47	29%	14%	9%	1%

<sup>\*</sup>Table is based on Q12: "How often do you do each of the following activities? every time, most of the time, some of the time, rarely, or never? Significant differences at the 95 percent confidence level are highlighted. Residents most frequently use re-usable food containers instead of plastic bags or plastic wrap, followed by drinking water from sources other than small, plastic bottles, and buying products in bulk.

#### **Organic Waste Disposal** <sup>3</sup>

#### **How Residents Dispose of Food Scraps**

California residents most frequently dispose of food scraps along with the regular trash (58 percent), followed by the garbage disposal (38 percent). Only 8 percent of residents compost, either in their backyard or through a curbside composting program. Spanish-speaking respondents were more likely than other groups to report that they dispose of food scraps along with the regular trash and were the least likely to compost. English-speaking respondents were more likely to use the garbage disposal than were other groups. See Figure 21.

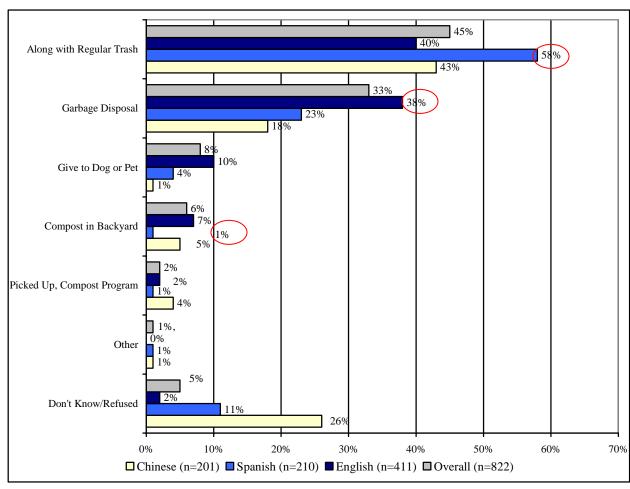


Figure 21: How Residents Usually Dispose of Food Scraps Respondents Overall and by Language

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<sup>\*</sup>Chart is based on Q13: "How do you usually dispose of food scraps in your household?" Statistically significant differences at the 95 percent level are circled. Spanish-speaking respondents were more likely to report that they dispose of food scraps along with the regular trash and the least likely to compost. English-speaking respondents were the most likely to report that they use the garbage disposal, compared to other language groups.

<sup>&</sup>lt;sup>3</sup> Information on green waste is presented on page 20.

#### **Reasons for Composting**

When asked why they compost, more than half of all respondents (53 percent) reported that they did it because it was "good for [their] garden" followed by 31 percent who reported that composting was "good for the environment." Results did not vary by language spoken. "Other" responses included reducing total waste and reducing the smell in trash bins when food scraps decompose. Results are presented in **Figure 22.** 

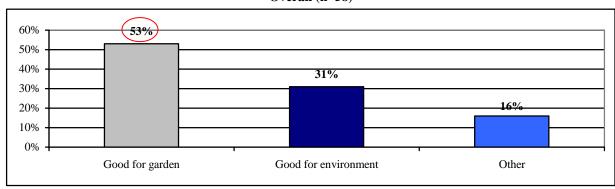


Figure 22: Reasons for Composting, Among Those Who Currently Compost Overall (n=58)

<sup>\*</sup>Chart is based on Q14: "What is the main reason you compost?" Statistically significant differences at the 95 percent level are circled.

#### **Hazardous Waste Disposal**

#### **How Residents Dispose of Household Hazardous Waste**

Half of California residents properly dispose of hazardous waste, with just over one-third (39 percent) reporting that they take their hazardous waste to a designated collection facility and 11 percent who have their hazardous waste collected by their waste hauler.

Nearly one-third of all respondents surveyed reported that they "do not have that type of waste," suggesting that residents are not well informed about what constitutes hazardous materials. Results varied by language. As seen in **Figure 23**, English-speaking respondent were more likely to report that they take their hazardous waste to a designated site, while Spanish- and Chinese-speaking respondents were more likely to report that they do not have hazardous waste. Spanish-speaking respondents were the least likely to report that they take their hazardous waste to appropriate facilities.

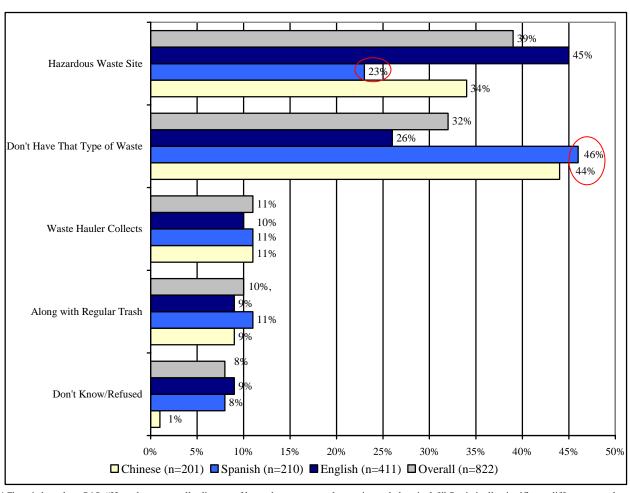


Figure 23: How Residents Usually Dispose of Hazardous Waste Respondents Overall and by Language

<sup>\*</sup>Chart is based on Q15: "How do you usually dispose of hazardous waste such as paint and chemicals?" Statistically significant differences at the 95 percent level are circled. English-speaking respondent were more likely to report that they take their hazardous waste to a designated site or facility. Spanish- and Chinese-speaking respondents were more likely to report that they did not have "that type of waste."

#### Reasons for Not Disposing of Hazardous Waste Properly

Respondents who reported that they do not take their hazardous waste to a designated facility or have it picked up curbside, were asked why they do not take hazardous materials to a designated collection site. Results are presented in **Figure 24. The most frequently cited reason for not disposing of hazardous waste properly was lack of information about where to go,** followed by not enough time, too few items to be worthwhile, and not knowing when to go. A total of 15 percent of respondents asked the question reported that they did not know what constituted hazardous waste.

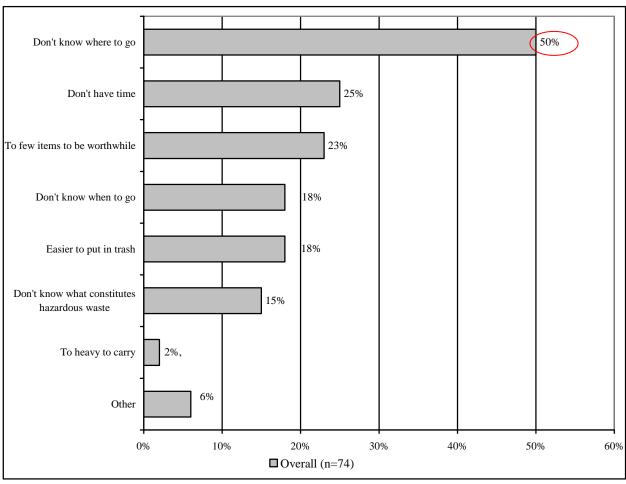


Figure 24: Reasons for Not Taking Hazardous Waste to a Designated Collection Site Respondents Overall (n=74)

<sup>\*</sup>Chart is based on Q16: "Why don't you take your hazardous waste to a special collection site?" Statistically significant differences at the 95 percent level are circled. "Don't know where to go" was the most frequently cited reason for not taking hazardous waste to a designated site. Sample sizes were too small for statistical testing by language. Results exclude respondents who answered "Don't know/refused."

#### Likelihood of Using Hazardous Waste Disposal Sites Among Non-Users

Respondents who do not properly dispose of hazardous waste were asked how likely they would be to take their hazardous waste to a safe disposal site if one were located near their house. As seen in Table 5, eight-out-of-ten respondents (80 percent) reported that they would be "very likely" to drive to a hazardous waste disposal site in the future if it were conveniently located.

Table 5: Likelihood of Using Hazardous Waste Disposal Sites in the Future If Location Were Convenient, Among Non-Users

	Very	Somewhat	Not too	Not at all
	Likely	Likely	Likely	Likely
All non-users (n=132)	80%	18%	2%	1%

<sup>\*</sup>Table is based on Q17: "If there were a place near your house where you could safely dispose of hazardous waste at no cost, how likely would you be to do so?" There were no significant differences by language spoken. Highlighted figures are statistically significant from figures in Table 6.

The same group of non-users were also asked how likely they would be to take their hazardous waste to a safe disposal site if they received cash back or a coupon towards a new purchase. Results are presented in **Table 6**. In contrast to convenience as an incentive, only half of residents (56 percent) reported that they would be "very likely" to take their waste to a hazardous waste disposal site if offered a financial incentive. Significant differences between the two tables are highlighted.

Table 6: Likelihood of Using Hazardous Waste Disposal Sites in the Future If Received Financial Incentive, Among Non-Users

	Very	Somewhat	Not too	Not at all
	Likely	Likely	Likely	Likely
All non-users (n=135)	56%	35%	5%	4%

<sup>\*</sup>Table is based on Q19: "If you received cash back or a coupon towards a new purchase, how likely would you be to take hazardous waste to a special collection site?" There were no significant differences by language spoken.

#### Number of Miles Residents Are Willing to Drive to Dispose of Hazardous Waste

All respondents, except those who had curbside collection and hazardous materials or reported that they had no hazardous waste, were asked how far they would be willing to drive to a hazardous waste collection site. **As seen in Table 5, most residents are willing to drive considerable distances to dispose of waste.** More than half of residents (57 percent) are willing to drive between two and ten miles to dispose of hazardous materials and more than one-quarter (27 percent) are willing to drive more than 10 miles. English-speaking residents were more willing than Spanish-speaking or Chinese-speaking residents to drive long distances.

Table 7: How many Miles Residents are Willing to Drive to Dispose of Hazardous Waste Respondents Overall

	Zero Miles	Within 2 miles of home	2-5 miles from home	5-10 miles from home	More than 10 miles
All respondents who have hazardous waste and do not have hazardous waste pick-up (n=433)	2%	13%	27%	30%	27%

<sup>\*</sup>Table is based on Q18: "How many miles would you be willing to drive to safely dispose of hazardous waste?"

#### CONCLUSIONS AND RECOMMENDATIONS

Study findings suggest that past outreach efforts by CIWMB and other entities have helped raise public awareness about recycling and waste reduction; however, further efforts are needed. California residents are well informed about recycling practices and, although they could recycle a greater proportion of their household waste, are regularly recycling key items. The majority of California residents consistently recycle metal, tin, aluminum, plastic, paper, and glass. In contrast, residents are less well informed about strategies to reduce waste and do not consistently reduce and reuse. Similarly, many residents are not well informed about what constitutes household hazardous waste or how to dispose of these materials. Based on these findings, we recommend the following strategies for reducing waste and promoting proper waste disposal.

Recommendation 1: Increase public outreach to promote waste reduction and reuse, which lags behind recycling in both public awareness and practice. In contrast to recycling habits, the majority of California residents are not consistently practicing waste reduction strategies. Only about one-third of California residents reuse food containers or drink water from sources other than small plastic water bottles on a regular basis, and less than one-in-five residents (18 percent) consistently buy products in bulk or items with less packaging.

Recommendation 2: Increase public awareness about what constitutes household hazardous waste and provide details about when and where residents can take these materials to collection sites. Nearly one-third of all residents surveyed reported that they do not have hazardous waste, and non-English speakers were even more likely to make such claims. The most frequently cited reason for not disposing of hazardous waste properly was lack of information about where to go, followed by not lack of time. Outreach efforts should also include Spanish-speaking markets since these residents are less likely to take hazardous waste to disposal sites and more likely to report that they have no such materials.

Recommendation 3: In promoting the proper disposal of hazardous waste, focus resources on making disposal convenient, rather than providing coupons and cash incentives. Eight-out-often respondents (80 percent) reported that they would be "very likely" to drive to a hazardous waste disposal site in the future if it were conveniently located. In contrast to convenience as an incentive, only half of residents (56) reported that they would be "very likely" to take their waste to a hazardous waste disposal site if offered a financial incentive.

Recommendation 4: Continue to support efforts to make recycling services available to multi-family households. Households with curbside recycling services consistently use the bins to recycle and recycle a larger proportion of their total waste compared to residents without the service. Among households that recycle 25 percent or less of their household trash, the two most frequently cited reasons for not recycling was the mess and inconvenience of storing recyclables and not have recycling bins.

Recommendation 5: Continue public outreach efforts targeting Spanish-speaking residents with regard to recycling. Spanish-speaking residents tend to be less familiar than other groups about the types of items that can be recycled, more likely to report "don't know" when asked where they would go for information on recycling, and, along with Chinese-speaking residents, tend to recycle less of their total household waste than do other residents.

## APPENDIX A: SURVEY INSTRUMENT WITH OVERALL FREQUENCIES

#### California Integrated Waste Management Board (CIWMB): Two Pronged Approach General Waste Reduction Attitudes and Behavior Telephone Survey

**Total Frequencies Weighted** 

#### Introduction

Hello, my name is \_\_\_\_\_\_. I am calling on behalf of an agency within the California Environmental Protection Agency. I am conducting a survey of California residents and would like to get your opinions regarding the environment.

- 01 willing to continue
- 02 refusal
- 03 call back <at specific time>
- 04 call back <no specific time>
- 05 no answer
- 06 busy
- 07 answering machine
- 08 disconnected number
- 09 language barrier (not Spanish or Chinese)
- 10 language barrier (Spanish)
- business number
- 12 fax machine
- language barrier (Chinese)

#### **Screener Questions**

- 1. Are you 18 or older? (n=822)
  - 1 Yes 100%
  - 2 No (Go to 1a)
- 1 a. Is there someone who is over the age of 18 living in your home and who is available to talk now?
  - 1 Yes (Go back to introduction with new respondent)
  - No (If an adult who lives here is not currently present, enter yes to go back to introduction and arrange a call-back)

#### **Environmental Priorities**

- 2. What environmental problems concern you most? (Do not read. Check all that apply. Probe: "anything else?" Record first mention. If respondent answers "pollution" ask, what kind of pollution?) (n=822)
  - 1 Global warming 22% first mention; 27% total mentions
  - 2 Extinction of plants and animals 2% first mention; 7% total mentions
  - Water pollution 11% first mention; 26% total mentions
  - 4 Toxic waste 4% first mention; 9% total mentions
  - 5 Landfill waste 4% first mention; 13% total mentions
  - 6 Air pollution (car emissions/traffic) 35% first mention; 50% total mentions
  - Pollution (misc., respondent refuses to be more specific) 7% first mention; 13% total mentions
  - 8 Other (specify) 4% first mention; 7% total mentions (includes 1% concerned about energy/oil)
  - 9 Don't know/refused 11%
- 3. How concerned are you about the amount of garbage California households produce? (read) (n=822)
  - 1 Very concerned 44%
  - 2 Somewhat concerned 34%
  - 3 Not too concerned 13%
  - 4 Not at all concerned 6%
  - 9 Don't know/refused (DO NOT READ) 3%

#### General Recycling and Waste Reduction

- 4. California generates approximately 92 million tons of waste each year. In what ways can you personally reduce the amount of trash and garbage that ends up in landfills? (Do not read. Check all that apply. Probe: anything else? Record first mention) (n=822)
  - Recycle bottles, cans, newspapers, magazines, junk mail, paper products, plastics 67% first mention; 71% total mentions
  - O2 Separate yard waste/green waste (includes grass and tree trimmings) 3% first mention; 8% total mentions
  - O3 Compost food scraps 1% first mention; 6% total mentions
  - Properly dispose of e-waste for reuse or recycling (cell phones, print cartridges, computers, ipods, etc.) <1% first mention; 3% total mentions
  - Properly dispose of used tires <1% first mention; 1% total mentions
  - Take used oil to collection locations 0% first mention; 1% total mentions
  - O7 Take hazardous waste to collection locations (paint, batteries, chemicals, etc.) 0% first mention; 1% total mentions
  - Buy recycled products 1% first mentions; 6% total mentions
  - Buy products in larger sizes or in bulk instead of in smaller or single serve packages 3% first mention; 9% total mentions
  - Produce less waste 2% first mention; 3% total mentions
  - 11 Use reuseable products 2% first mention; 3% total mentions
  - 12 Use less paper 1% first mention; 1% total mentions
  - Proper disposal of garbage 2% first mention; 3% total mentions
  - Other (specify) 3% first mention; 7% total mentions
  - 99 Don't know/refused 16%

- 5. Before this survey, were you aware that the following household items can be recycled? (Read list. Yes/No punch for each stem. Rotate stems) **MODULE ONE ONLY** (n=410)
  - Magazines, junk mail, mixed paper 89%
  - O2 Plastic food containers 92%
  - Yard and Garden Trimmings 81%
  - O4 Cardboard 92%
  - 05 Electronic equipment (parts from computers, phones, etc.) 82%
  - 99 Don't know/refused 0%
- 6. Do you have recycling bins that are picked up along with your regular trash? (n=822)
  - 1 Yes 75%
  - 2 No 24%
  - 9 Don't know/refused <1%
- 7. Do you recycle the following items every time, most of the time, some of the time, rarely, or never? (Read list. Code 1 to 5, with "never" = 1, 9 = don't know/refused) (n=822)
  - 1 Paper, such as newspapers, magazines, and junk mail
  - 2 Glass, such as bottles and jars
  - 3 Metal, tin, and aluminum cans
  - 4 Plastic, such as bottles and food containers
  - 6 Plastic grocery bags

	Every time	Most of the	Some of the	Rarely	Never	DK/Refused
		time	time			
Paper, newspaper, mag	60%	14%	6%	4%	15%	
Glass	65%	14%	5%	3%	11%	1%
Metal, tin, aluminum	71%	12%	7%	3%	7%	
Plastic, such as bottles and	71%	12%	6%	2%	9%	1%
food containers						
Plastic grocery bags	48%	11%	8%	5%	26%	2%

- 8. Do you have special bins for yard waste that are picked up along with your regular trash? (n=822)
  - 1 Yes 64%
  - 2 No (**skip to 10**) 34%
  - 9 Don't know/refused (**skip to 10**) 1%
- 9. Do you use those bins to recycle grass clippings and yard waste? (n=530)
  - 1 Yes 91%
  - 2 No 9%

- 10. On a weekly basis, what percentage of all the trash in your household is recycled? (Read list) (n=822)
  - 1 10% or less 17%
  - 2 More than 10% but less than 25% 15%
  - 3 25% to 50% 23%
  - 4 More than 50% but less than 75% 19%
  - 5 75% or more 19%
  - 9 Don't know/refused (DON'T READ) 6%
- 11. What is the main reason you do not recycle more of your trash? (Do not read) (n=822)
  - 1 No room in recycling bins 8%
  - 2 Don't have recycling bins 11%
  - 3 Don't know what other items can be recycled 7%
  - 4 It's too messy and/or inconvenient 16%
  - 5 None of the other trash is recyclable 27%
  - 6 Don't use recyclable items/too few to make it worthwhile 8%
  - 7 Not motivated 2%
  - 8 Other (specify) 6%
  - 9 Don't know/refused 15%
- 12. How often do you do each of the following activities? Every time, most of the time, some of the time, rarely, or never? (code 1-5 with "every time" =1, Don't know/refused = 9) (n=822)
  - 1 Buy products in larger sizes or in bulk instead of in smaller or single serve packages
  - 2 Use reusable food storage containers instead of plastic bags or food wraps
  - 3 Drink water from sources other than small, disposable plastic water bottles

	Every time	Most of the time	Some of the time	Rarely	Never	Don't know/refused
Buy products in bulk	18%	29%	29%	14%	9%	1%
Use Reusable food containers	35%	30%	20%	6%	7%	2%
Drink water from sources other than small, plastic bottles	34%	24%	16%	11%	15%	1%

#### Organic Waste

- 13. How do you usually dispose of food scraps in your household? (Do not read. Check one.) (n=822)
  - 1 Along with the regular trash 45%
  - 2 Put in the garbage disposal 33%
  - 3 Compost in backyard 6%
  - 4 Take to a permitted compost facility 0%
  - 5 Take to a community garden 0%
  - 6 Picked up by waste hauler as part of a food collection or composting program 2%
  - 7 Give to dog or pet 8%
  - 7 Other (specify) <1%
  - 9 Don't know/refused 5%

#### If answer to Q13 = 3, 4, 5, or 6, ask Q14.

- 14. What is the <u>main</u> reason you compost? (Do not read. Check one) (n=58)
  - 1 It's good for the environment 28%
  - 2 It's good for my garden/yard 47%
  - 3 It's easy 0%
  - 4 Other (specify) 14%
  - 9 Don't know/refused 11%

#### Hazardous Waste

- 15. I want to ask you about hazardous waste. How do you usually dispose of household hazardous waste such as paint and chemicals? (Rotate stems. Read.) (n=822)
  - 1 Along with the regular trash 10%
  - Waste hauler picks it up by the curb (**skip to Q20**) 11%
  - At a hazardous waste site (**skip to Q18 and then go to 20**) 39%
  - 5 Don't have that type of waste (DON'T READ) (**skip to Q20**) 32%
  - 9 Don't know/refused (**skip to Q17**) 8%
- 16. Why don't you take your hazardous waste to a special collection site? (Read. Check all that apply) (n=81)
  - Easier to put in the trash 16%
  - Don't have the time 23%
  - Didn't know these items couldn't go in the regular trash 10%
  - Don't know where to go 45%
  - Don't know when to go (what days/times) 16%
  - Don't know what is considered hazardous waste 13%
  - Too heavy to carry 2%
  - Too few items to make it worthwhile 21%
  - 09 Other (specify) \_\_\_\_\_\_ 5%
  - 99 Don't know/refused 9%

17. If there were a place near your house where you could safely dispose of hazardous waste at no cost, how likely would you be to do so? Very likely, somewhat likely, not too likely, or not at all likely? (n=147)

- 1 Very likely 72%
- 2 Somewhat likely 16%
- 3 Not too likely 2%
- 4 Not at all likely 1%
- 9 Don't know/refused (DO NOT READ) 10%
- 18. How many miles would you be willing to drive to safely dispose of hazardous waste? (Read list) (n=468)
  - O Zero miles; I'm not willing to drive to dispose of waste 2%
  - 1 Within 2 miles of your home 12%
  - 2 Between 2 and 5 miles 25%
  - 3 Between 5 and 10 miles 28%
  - 4 More than 10 miles 25%
  - 9 Don't know/refused (DO NOT READ) 8%
- 19. If you received cash back or a coupon towards a new purchase, how likely would you be to take hazardous waste to a special collection site? (read) (n=147)
  - 1 Very likely 52%
  - 2 Somewhat likely 32%
  - 3 Not too likely 4%
  - 4 Not at all likely 3%
  - 9 Don't know/refused (DO NOT READ) 8%

#### Sources of Information

- 20. If you wanted more information on how to reduce waste and recycle, where would you go? (Do not read.) (n=822)
  - 1 General Internet search 36%
  - 2 Government Agency (website, calling, or visiting) 24%
  - 3 Environmental organization 7%
  - 4 Universities 0%
  - 5 Library 2%
  - 6 Friends/family 3%
  - 7 Media 3%
  - 8 Phonebook 2%
  - 9 Waste Management Company 4%
  - 10 Other (specify) 1%
  - 99 Don't know/refused 25%

#### **Global Warming**

- 21. Let's talk about global warming. Do you believe global warming is really happening? (n=822)
  - 1 Yes 85%
  - 2 No (**skip to Q25**) 7%
  - 9 Don't know/refused 8%
- 22. How concerned are you about global warming? (read) (n=765)
  - 1 Very concerned 59%
  - 2 Somewhat concerned 28%
  - 3 Not too concerned 7%
  - 4 Not at all concerned 3%
  - 9 Don't know/refused (DO NOT READ) 2%
- 23. Do you believe that the actions of individuals have a great impact, some impact, little impact, or no impact on global warming? (n=765)
  - 1 Great impact 55%
  - 2 Some impact 29%
  - 3 Little impact 8%
  - 4 No impact 2%
  - 9 Don't know/refused 7%
- 24. How much of an impact do you think recycling and waste reduction have on global warming? (read) (n=765)
  - 1 Great impact 41%
  - 2 Some impact 37%
  - 3 Little impact 11%
  - 4 No impact 2%
  - 9 Don't know/refused (DON'T READ) 8%

#### **Awareness of CIWMB**

- 25. Have you heard of the state agency called the California Integrated Waste Management Board? **MODULE TWO ONLY** (n=412)
  - 1 Yes 27%
  - 2 No 70%
  - 9 Don't know/refused (DO NOT READ) 3%

#### **Demographics**

I'd like to ask you a few final questions for research purposes only. Your answers are confidential.

26. What year were you born? Mean age = 46 years old (n=822)

27. What is the high $(n=822)$	hest level of school completed by anyone living in your household? (DON'T READ)
1 Grades	1-8 6%
	9-11 5%
	chool Graduate/ GED 18%
	College/Vocational Training 17%
	e Graduate 50%
6 Post Gr	raduate/Professional School 24%
9 Refused	13%
• •	ase tell me what ethnic group you identify with? Are you Hispanic/Latino, can American, Asian, Caucasian, or of some other ethnic or racial background?
1 Hispani	ic/Latino 39%
	African American 3%
3 Asian 9	
4 Caucas	
	Specify) 5%
9 Refused	d (DON'T READ) 4%
	ead some categories of household income. Please stop me when I ategory of your total 2006 annual household income, before taxes: (n=822)
1 Less th	an \$20,000 14%
	nan \$20,000 but less than \$35,000 17%
	nan \$35,000 but less than \$50,000 13%
	nan \$50,000 but less than \$75,000 12%
5 More th	nan \$75,000 but less than \$100,000 11%
	nan \$100,000 but less than \$150,000 8%
	nan \$150,000 but less than \$200,000 3%
	200,000 3%
9 Refuse	d (DON'T READ) 20%
30. (GENDER BY	OBSERVATION DON'T READ) (n=822)
1 male 48	3%
2 Female	52%
31. Note Language	(English, Spanish, Chinese) (n=822)
English = 411 Spanish = 210	
Chinese = 201	

That concludes our survey. Thank you very much for your time.